DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takatsu ('702) in view of Kurozasa ('546).

Regarding claim 1, Takatsu ('702) discloses an image forming device (digital copier, **See Figure 1; Col. 3, Line 23-27**) includes a control unit (user I/F section, **See Figure 1, Element 6**) for accepting reservations for a plurality of jobs that includes an image forming processing (reservation for inputting a job, **See Col. 4, Line 34-41**, such as copying a document, **See Col. 4, Line 56-65**) and for carrying out successive job execution in which a next job is started during an image forming of a last page of a current job (whenever the current job is successfully completed, the next job is processed, See **Figure 8C; Col. 9, Line 53-62**), based on the plurality of jobs that the reservations are accepted (reserving multiple jobs and processing each one accordingly, such as copying, **See Figure 8A**), a conveyance path for conveying a transfer paper from a start of feeding of the transfer paper (from the tray where the sheets are normally ejected from, **See Col. 6, Line 11-12**) to an end of exiting of the transfer paper (exit after performing a post transfer sheet treatment if requested, such as a hole punch, staple, etc., **See Col. 3, Line 51-53**), an image forming unit (embodied

within the digital copier, **See Figure 1**) for forming and outputting an image on the transfer paper, based on an instruction from the control unit (output the document according to reserved user operated options, **See Col. 9, Line 30-44**), such that the control unit sets a number of reservation acceptable jobs N2 (the control unit sets an amount of allowable job reservations, **See Col. 7, Line 13-16**), such that the control unit manages acceptance of the reservations for the jobs according to the set number N2 of the reservations acceptable job (a new job is not able to be reserved once the maximum is reached until the job with the highest priority is completed, **See Col. 9, Line 44-53**).

Takatsu ('702) does not disclose a maximum number of the conveyed transfer papers that can be present at the same time on the conveyance path of the transfer paper from the start of the feeding to the end of the exiting in the image forming device.

Kurozasa ('546) discloses a conveying path for circulating paper at a predetermined interval, such that the plurality of print sheet having been continuously fed, so as to not overlap one another (**See Col. 4, Line 64-Col. 5, Line 6**).

Even though Kurozasa ('546) does not fully disclose setting a maximum number, N1, of conveyed transfer papers that can be present at the same time on the conveyance path, it would have been obvious to have one set within the printer in order to satisfy the job requests of the users. In the instance that the printer is a group centralized printer, such that it is able to accept and reserve jobs from multiple users, N2, it has to be able to accept and process multiple jobs from a single user or multiple jobs from multiple users. By denying the users' requested print job, such as in the event the amount of paper conveyed is more than the amount of reserved jobs, it prevents the

user or users from knowing when the printer is available to accept jobs again. Thus, it would have been obvious to have a particular number of conveyed papers, N1, be less than the number of reserved print jobs N2 within the group centralized printer in order to satisfy the multiple print jobs submitted from multiple users.

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include a conveyance path and defining the maximum number of sheets on the same time on the conveyance path, such as the one disclosed within Kurozasa ('546) and incorporate it into the image forming device of Takatsu ('702) because it allows the printer to continuously read and output the multiple reserved print jobs, which outputs the jobs at a faster rate compared to having the printer stop between each corresponding print job in order to process it before outputting.

Regarding claim 2, Takatsu ('702) discloses an image reading unit (scanning section, **See Figure 1, Element 1**) such that the image forming unit forms the image based on image data read by the image reading unit (scanned by the scanning section and outputted through the copying section, **See Col. 3, Line 40-53**).

Regarding claim 3, Takatsu ('702) discloses whenever the number of reservations have been accepted by the control unit, that the control unit can accept a reservation of a new job when the last page of the current job exists the conveyance path (once a previous job is completed, a reservation for a new job is able to be accepted, **See Col. 9, Line 48-53**).

Regarding claim 4, Takatsu ('702) does not disclose that the control unit receives the number N1 based on a main body identification signal.

Kurozasa ('140) discloses detecting the remaining amount of paper left in each paper tray from a sensor signal located within each tray (**See Col. 4, Line 29-32**).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include an identification signal within the main body of the image forming device, such as the one disclosed within Kurozasa ('140) and incorporate it into the image forming device of Takatsu ('702) because it allows the sensors to detect if a job is able to be completed based on the amount of paper remaining without having the user to refill it prior to completing the job.

Regarding claim 5, the combination of Takatsu ('702) and Kurozasa ('140) discloses that the control unit sets the number N2 of the reservation acceptable jobs based on the number N1 received based on the main body identification signal (the sensors are used to determine if user requested print jobs is able to be processed at the requested paper size, **See Kurozasa ('140), Figure 16; Col. 12, Line 3-8**).

Regarding claim 6, Takatsu ('702) discloses a display unit (**See Figure 1, Element 6**), such that the control unit carries out a display on the display unit according to the set number N2 of the reservation acceptable jobs (the display displays the number of reservations so the user is able to see if a new reservation is able to be set, **See Figure 7A-7F; Col. 7, Line 51-65**).

Regarding claim 7, Takatsu ('702) discloses that the display unit displays a tag corresponding to the set number N2 of the reservation acceptable jobs (**See Figure 7F; Col. 9, Line 22-29**).

Regarding claim 8, Takatsu ('702) discloses a display unit (**See Figure 1, Element 6**), such that the control unit controls the display unit to display a number of job display areas corresponding to the number N2 of the reservation acceptable jobs (**See Figure 7F**), and the control unit controls the display unit to assign information about the jobs for which the reservation are accepted to the job display area in one to one relation (displays information such as the current status of the most recent job as well as if a new reservation is possible, **See Col. 7, Line 51-Col. 8, Line 3**).

Regarding claim 9, the combination of Takatsu ('702) and Kurozasa ('546) discloses that the image forming device is connectable with a finisher (post transfer sheer treatment, **See Takatsu ('702), Col. 3, Line 48-53**) and maximum number N1, based on which the control unit sets the number N2, is variable (the amount of conveyed paper varies based on the size of the print sheet as well the predetermined intervals between conveying each sheet, **See Kurozasa ('546), Col. 4, Line 66-Col. 5, Line 6**) depending upon according to a model of the finisher and according to whether the image forming device is connected with the finisher (user is able to use a predetermined amount of reservations for inputting a job, **See Col. 4, Line 34-41**, as well as include user conditions, **See Col. 4, Line 1-14**, such as stapling, punching, etc., **See Col. 3, Line 48-53**).

Regarding claims 10-18, the rationale provided in the rejection of claims 1-9 is incorporated herein. In addition, the image forming device of claims 1-9 corresponds to the method of claims 10-18 and performs the steps disclosed herein.

Response to Arguments

Applicant's argues the prior art does not disclose that the number of reservation acceptable jobs, N2, is set to satisfy N2 ≥ N1, based on the number N1. Thus, the prior art of Kurozasa is used in combination with Takatsu and does meet the limitations of the amended claims as disclosed within the rejection above. Because a new reference was used to reject the claims as well as the limitation above was previously recited in claims 9 and 18 and now used within independent claims 1 and 10, **THIS ACTION IS MADE NON-FINAL**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Rudolph whose telephone number is (571) 272-8243. The examiner can normally be reached on Monday through Friday 8 A.M. - 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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